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# 510(K) SUMMARY

JUN 1 4 2012

Contact:

Kevin G. Stevens
DePuy Spine, Inc.
325 Paramount Drive
Raynham, MA 02767
508.828.3288

**Device Trade Name:** 

EXPEDIUM® Spine System, VIPER® System, VIPER®2 System

Manufacturer:

DePuy Spine, Inc. 325 Paramount Drive Raynham, MA 02767

**Common Name:** 

**Pedicle Screw System** 

Classification:

21 CFR §888.3050; Spinal interlaminar fixation orthosis

21 CFR §888.3060; Spinal intervertebral body fixation orthosis

21 CFR §888.3070; Pedicle screw spinal system

Class:

111

**Product Code:** 

MNI, MNH, NKB, KWQ, KWP, OSH

## **Indications For Use:**

The EXPEDIUM and VIPER/VIPER2 Spine Systems are intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of acute and chronic instabilities or deformities of the thoracic, lumbar and sacral spine.

The EXPEDIUM and VIPER/VIPER2 Spine System metallic components are intended for noncervical pedicle fixation and nonpedicle fixation for fusion for the following indications: degenerative disc disease (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); spondylolisthesis; trauma (i.e., fracture or dislocation); spinal stenosis; curvatures

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(i.e., scoliosis, kyphosis, and/or lordosis); tumor, pseudoarthrosis; and failed previous fusion in skeletally mature patients.

When used in a posterior percutaneous approach with MIS instrumentation, the VIPER/VIPER2 System metallic components are intended for noncervical pedicle fixation and nonpedicle fixation for fusion for the following indications: degenerative disc disease (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); spondylolisthesis; trauma (i.e., fracture or dislocation); spinal stenosis; curvatures (i.e., scoliosis, kyphosis, and/or lordosis); tumor, pseudoarthrosis; and failed previous fusion in skeletally mature patients.

When used for posterior non-cervical pedicle screw fixation in pediatric patients, the EXPEDIUM and VIPER/VIPER2 System metallic implants are indicated as an adjunct to fusion to treat adolescent idiopathic scoliosis. The EXPEDIUM and VIPER/VIPER2 systems are intended to be used with autograft and/or allograft. Pediatric pedicle screw fixation is limited to a posterior approach.

## **Device Description:**

The subject EXPEDIUM® Spine System and VIPER®/VIPER®2 Systems are pedicle screw scoliosis systems for the treatment of pediatric patients consisting of a wide range of components in a variety of geometries and sizes.

## **Predicate Device(s):**

The EXPEDIUM® Spine System and VIPER®/VIPER®2 System were shown to be substantially equivalent to previously cleared predicate devices.

#### **Performance Data:**

No new testing was performed. Published clinical results and engineering analysis supported the expansion of indications.

## Materials:

The subject EXPEDIUM Spine System components have been previously cleared in commercially pure titanium or titanium alloy conforming to ASTM F-67, ASTM F-136 or ASTM F-1472 specifications, stainless steel conforming to ASTM F-138, ASTM F-1314, or F-2229 specifications, cobalt-nickel-chromium-molybdenum alloy wire conforming to ASTM F-562 specifications, as well as longitudinal rods in cobalt-chromium-molybdenum alloy conforming to ASTM F-1537.

The subject VIPER/VIPER2 System components have been previously cleared in titanium alloy conforming to ASTM F-136 specifications, stainless steel conforming to ASTM F-138 or ASTM F-1314

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specifications, as well as longitudinal rods in cobalt-chromium-molybdenum alloy conforming to ASTM F-1537.

# **Conclusion:**

The substantial equivalence justification demonstrates that the device is as safe, as effective, and performs as well as the predicate device.



Food and Drug Administration 10903 New Hampshire Avenue Document Control Center – WO66-G609 Silver Spring, MD 20993-0002

June 27, 2013

DePuy Spine, Inc. % Mr. Kevin G. Stevens 325 Paramount Drive Raynham, Massachusetts 02767

Re: K111136

Trade/Device Name: EXPEDIUM Spine System, VIPER System, VIPER2 System

Regulation Number: 21 CFR 888.3070

Regulation Name: Pedicle screw spinal system

Regulatory Class: Class III

Product Code: NKB, OSH, MNI, MNH, KWP, KWQ

Dated: June 08, 2012 Received: June 11, 2012

Dear Mr. Stevens:

This letter corrects our substantially equivalent letter of June 14, 2012.

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical

device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638 2041 or (301) 796-7100 or at its Internet address <a href="http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm">http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm</a>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <a href="http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm">http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm</a> for the CDRH's Office

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

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For

Mark N. Melkerson
Director
Division of Orthopedic Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

**Enclosure** 

# 4. Indications for Use

510(k) Number (if known): Device Name: EXPEDIUM® Spine System, VIPER® System, VIPER®2 System The EXPEDIUM and VIPER/VIPER2 Spine Systems are intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of acute and chronic instabilities or deformities of the thoracic, lumbar and sacral spine. The EXPEDIUM and VIPER/VIPER2 Spine System metallic components are intended for noncervical pedicle fixation and nonpedicle fixation for fusion for the following indications: degenerative disc disease (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); spondylolisthesis; trauma (i.e., fracture or dislocation); spinal stenosis; curvatures (i.e., scoliosis, kyphosis, and/or lordosis); tumor, pseudoarthrosis; and failed previous fusion in skeletally mature patients. When used in a posterior percutaneous approach with MIS instrumentation, the VIPER/VIPER2 System metallic components are intended for noncervical pedicle fixation and nonpedicle fixation for fusion for the following indications; degenerative disc disease (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); spondylolisthesis; trauma (i.e., fracture or dislocation); spinal stenosis; curvatures (i.e., scoliosis, kyphosis, and/or lordosis); tumor, pseudoarthrosis; and failed previous fusion in skeletally mature patients. The EXPEDIUM and VIPER/VIPER2 PEEK rods are only indicated for fusion procedures for spinal stenosis with instability (no greater than Grade I spondylolisthesis) from L1-S1 in skeletally mature patients. When used for posterior non-cervical pedicle screw fixation in pediatric patients, the EXPEDIUM and VIPER/VIPER2 System metallic implants are indicated as an adjunct to fusion to treat adolescent idiopathic scoliosis. The EXPEDIUM and VIPER/VIPER2 systems are intended to be used with autograft . and/or allograft. Pediatric pedicle screw fixation is limited to a posterior approach. Over-The-Counter Use Prescription Use \_\_. √ AND/OR (Part 21 CFR 801 Subpart D) (21 CFR 801 Subpart C) (PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE OF NEEDED) Concurrence of CDRH, Office of Device Evaluation (ODE) Division of Surgical, Orthopedic, and Restorative Devices

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510(k) Number\_